



# Bridges

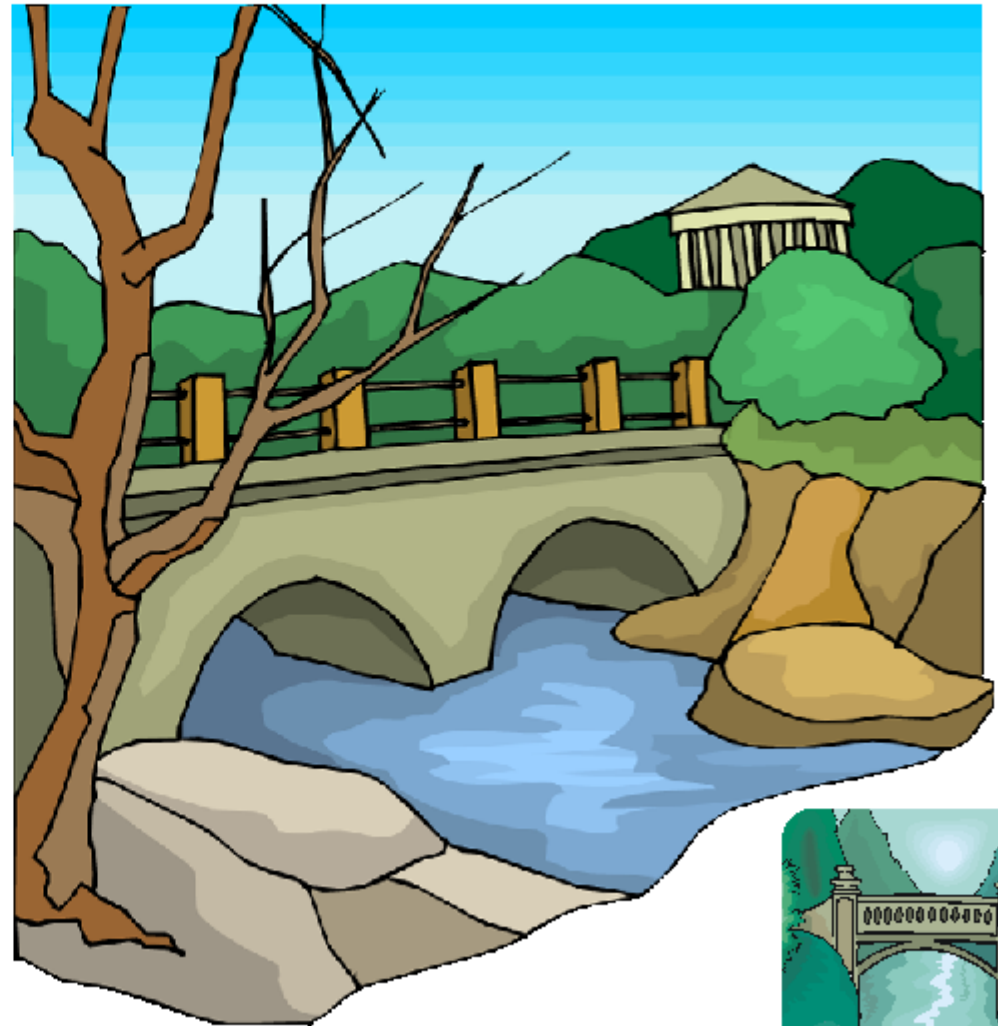




# What is a Bridge?



A bridge is a structure which is built to span a gorge, valley, road, stream, river, railway or any other physical obstacle.





# History of Bridges



The first bridges were simple logs or planks of wood which spanned small distances. They were not very strong or secure.





# Introducing the Arch



The Romans were the first to use arches in bridges and aqueducts.

These bridges were much stronger and could stand where other bridges would be swept away.







# What is the Keystone?



The keystone (or lockstone) is the middle stone in an arch. It is wedge shaped. The keystone is the most important stone in an arch bridge. Without it the arch would collapse.





# Triangles in Bridges



Many bridges have a beam or truss made of triangles. This is because triangles form very strong structures. A truss helps to keep the bridge stable.

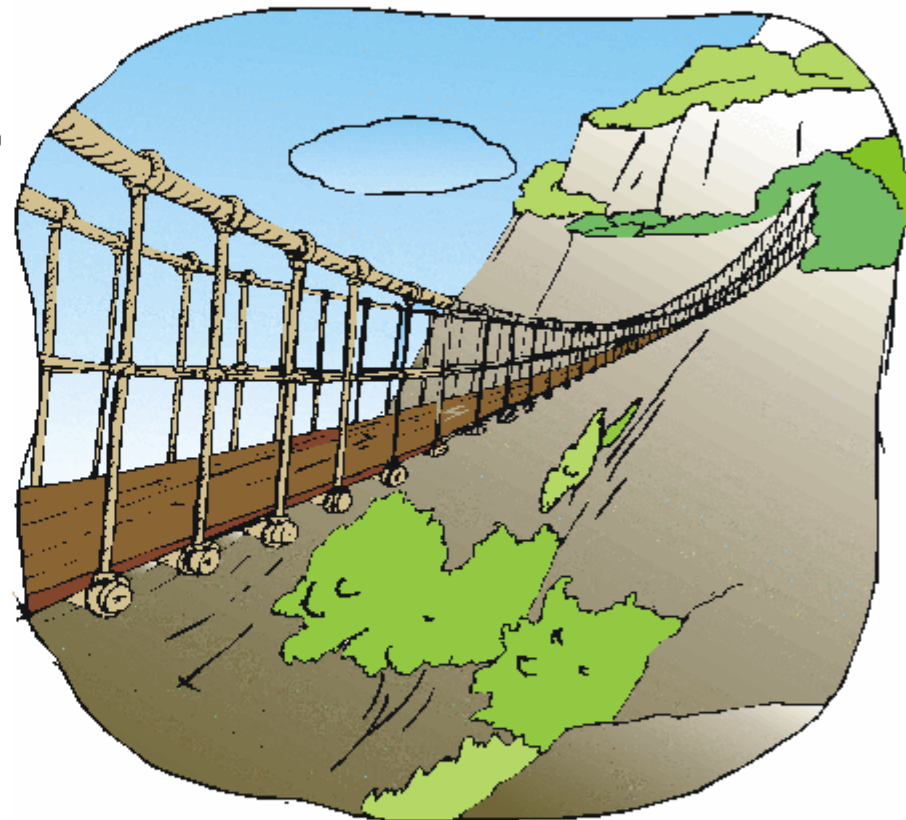




# Simple Suspension Bridges



The first suspension bridges were used by the Inca civilisation in Central America. They were simple rope bridges but they worked in a similar way to today's suspension bridges.





# The Golden Gate Bridge



Location: USA

Type: Suspension Bridge

Built: 1937

Measuring 1.7 miles long, it was the longest suspension bridge in the world when it was built.







# Tower Bridge



Location: England

Type: Movable, Bascule  
Suspension Bridge

Built: 1894

One of London's most famous landmarks and one of the most visited bridges in the world.

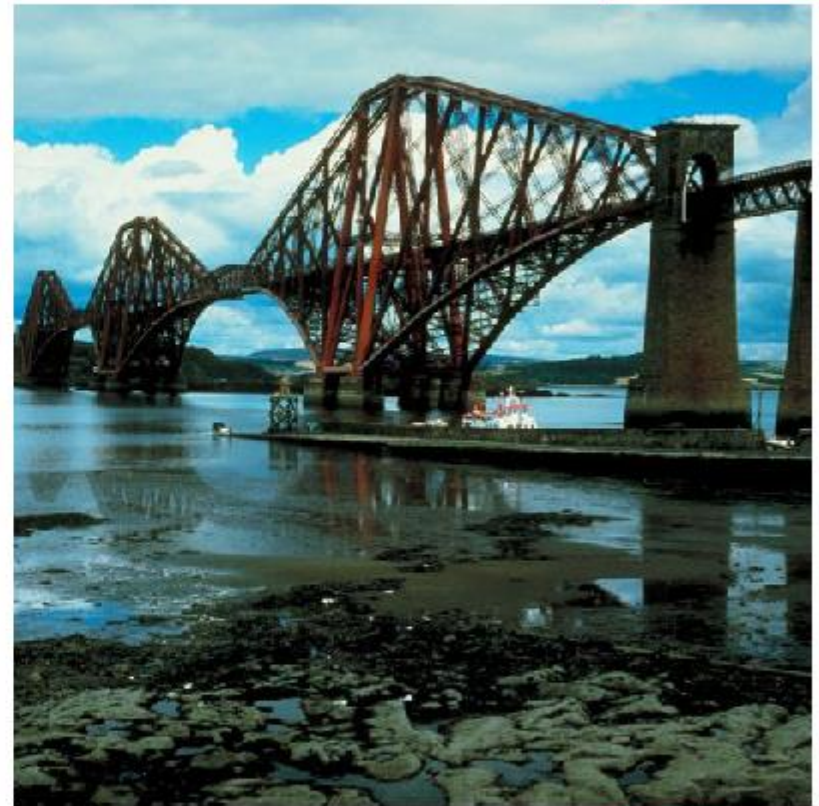




# Forth Bridge



Location: Scotland  
Type: Cantilever Railway Bridge  
Built: 1890  
55,000 tons of steel and more than 8 million rivets were used to make this huge bridge.







# Sunshine Skyway Bridge



Location: USA

Type: Cable Stayed

Built: 1987

The world's longest cable stayed single-span bridge crosses Tampa Bay, Florida. It measures 5.5 miles or 8.85km long.





# Menai Suspension Bridge



Location: Wales

Type: Suspension Bridge

Built: 1826

The world's first suspension bridge was built to connect Anglesey to the mainland of Wales.







# Akashi-Kaikyo Bridge



Location: Japan

Type: Suspension Bridge

Built: 1998

The world's longest suspension bridge connects two of Japan's islands together. It is 3911m long.





# Humber Bridge



Location: England

Type: Suspension Bridge

Built: 1981

The world's fourth longest single-span suspension bridge carries cars across the Humber.







# Sydney Harbour Bridge



Location: Australia

Type: Arch Bridge

Built: 1932

The world's largest (though not longest) steel arch bridge. It has become a well known Australian landmark.

